

REMARKS/ARGUMENTS

I. Introduction:

Claims 1, 11, 21, and 31 are amended and new claims 33-38 are added herein. With entry of this amendment, claims 1-38 will be pending.

II. Claim Rejections – 35 U.S.C. 102:

Claims 1, 6-9, 11, 16-19, 21, 26-29, 31, and 32 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,418,476 (Luciani et al.).

Applicants' invention, as set forth in the claims, is particularly advantageous in that it provides for interoperation between realms employing private local addresses and realms employing globally unique addresses while allowing nodes outside the private realm to initiate sessions with nodes inside the private realms without the use of NAT.

Luciani discloses a method for synchronizing network address translator (NAT) tables using OSPF (Open Shortest Path First) opaque LSA (Link State Advertisement). Luciani uses conventional NAT to provide network address translator functionality at border routers (see, e.g., col. 2, line 61 - col. 3, line 18). Mappings are provided between interior private addresses and public globally significant addresses. The disclosed technique does not accommodate a large number of privately addressed nodes.

Luciani does not disclose formatting an IP packet to include a header comprising a globally significant IP address identifying a realm and a locally significant IP address identifying a destination of the IP packet within the realm, as set forth in amended claims 1, 11, 21, and 31.

In rejecting the claims, the Examiner cites col. 3, lines 3 and 14-18. This section of the Background of the Invention describes a system for transferring data using conventional NAT. In this example, host 111 must use a globally unique IP address as the destination IP address when sending an IP datagram to a host outside of its realm.

When router 150 receives the packet, it uses its NAT software to translate and replace a globally unique destination IP address with the local IP address before forwarding the packet to node 121 (Fig. 1).

The Examiner also refers to the packet of Fig. 5. Fig. 5 simply illustrates the format of an Opaque LSA packet which includes a standard LSA header followed by NAT translation table information in fields 505-520. This packet is transferred between nodes such as 130 and 140 which are common border routers so that they each contain the same updated NAT tables. There is no locally significant IP address identifying a destination of the IP packet within a realm. The destination of the packet is the common border router which is in the same realm as the source node.

Accordingly, claims 1, 11, 21, and 31, and the claims depending therefrom, are submitted as patentable over Luciani.

Claim 7 is directed to a method for operating a gateway node to handle a received packet and includes extracting a globally significant destination address from a destination address field of the packet. If the globally significant destination address identifies a realm directly attached to the gateway node, a locally significant destination address is extracted from the packet and placed in the destination address field and the packet is forwarded to a local destination within the realm.

In contrast to the method set forth in claim 7, Luciani uses a NAT table at the border router to identify the local IP address that is mapped to a globally unique IP address. There is no disclosure in Luciani of extracting a globally significant destination address from a destination address field of a packet received at a border router.

Accordingly, claims 7, 17, 27, and 32, and the claims depending therefrom, are submitted as not anticipated by Luciani.

III. Claim Rejections – 35 U.S.C. 103:

Claims 2-4, 12-14, and 22-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani in view of U.S. Patent No. 6,304,913 (Rune).

Rune is directed to an Internet system and method for selecting a closest server from a plurality of alternative servers. The system includes a conventional DNS server for storing a common host name and a plurality of unique IP addresses. The system also includes a requesting host for transmitting a translation request containing the common host name to the database. In response to the translation request, the system selects the unique IP address assigned to the server located the nearest to the requesting host.

Neither Luciani nor Rune show or suggest resolving a globally significant IP address from a first component of a globally significant name and resolving a locally significant IP address from a second component of a locally significant name.

Rune simply uses a conventional DNS server to replace a common host name with an IP address. There is no teaching of resolving both a globally significant IP address and a locally significant IP address. As discussed above, Luciani only uses a globally unique address to send a packet to a host in a different realm. The local IP address is obtained through a mapping in a NAT table. Thus, there is no reason to resolve a globally significant IP address and a locally significant IP address. Furthermore, there is no discussion of resolving an IP address from one component of a name.

Accordingly, claims 2-4, 12-14, and 22-24 are submitted as patentable over Luciani and Rune.

Claims 5, 15, and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani in view of Rune and further in view of U.S. Patent Publication No. 2002/0169887 (McLampy et al.). Claims 10, 20, and 30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani in view of McLampy et al.

Applicants respectfully submit that McLampy et al. do not remedy the deficiencies of the primary references.

IV. Conclusion:

For the foregoing reasons, Applicants believe that all of the pending claims are in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 399-5608.

Respectfully submitted,



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